



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105**

APR 12 2013

William K. Dickinson
U.S. Department of the Interior
National Park Service
Lake Mead National Recreation Area
601 Nevada Way
Boulder City, NV 89005

Subject: Draft Environmental Impact Statement for Lake Mead Cottonwood Cove and Katherine Landing Development Conceptual Plans, Clark County, Nevada and Mohave County, Arizona (CEQ# 20130029)

Dear Mr. Dickinson:

The U.S. Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement (DEIS) for the Lake Mead Cottonwood Cove and Katherine Landing Development Conceptual Plans pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The DEIS clearly identifies opportunities to better meet the needs of visitors, such as altering traffic patterns to alleviate long boat launch lines. Reducing wait times would both improve visitor experiences and reduce emissions from idling vehicles. We also recognize National Park Service's (NPS) consideration of sustainable design elements, including efficient mechanical and electrical systems, recycled or locally produced materials, onsite generation of renewable energy, use of native plants, and techniques to protect dark skies. EPA encourages NPS to integrate such elements into project level plans.


Potential impacts to air and water quality do not appear to be fully documented in the DEIS; therefore, it is unclear whether additional mitigation would be appropriate. Additional information on water resources, floodplain management, as well as the extent and outcome of consultation with Native American Indian tribes is also needed in order to support a full assessment of the environmental impacts of the proposed project. Based on these concerns, we are rating the DEIS "Environmental Concerns – Insufficient Information" (EC-2). Please find a summary of our rating system attached, along with our detailed comments.

We appreciate the opportunity to review this DEIS, and are available to discuss our comments. If you have any questions, please contact the lead reviewer for this project, Jennifer Blonn, by phone at 415-972-3855, or by email at blonn.jennifer@epa.gov. When the Final EIS is released

for public circulation, please provide one hard copy and three CDs to the EPA Region 9 office in San Francisco (mail code CED-2).

Sincerely,

Sincerely,



Kathleen Mary Goff

Kathleen Martyn Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosures:

Summary of the EPA Rating System
EPA Detailed Comments

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

“LO” (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

“EC” (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

“EO” (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

“EU” (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

Category “1” (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category “2” (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category “3” (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

U.S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR LAKE MEAD COTTONWOOD COVE AND KATHERINE LANDING DEVELOPMENT CONCEPTUAL PLANS, CLARK COUNTY, NEVADA AND MOHAVE COUNTY, ARIZONA, APRIL 12, 2013

Air Quality

The Draft Environmental Impact Statement (DEIS) includes a brief rationale to support excluding air quality as a component of the full environmental analysis. Page 13 concludes that impacts on air quality would be negligible and greenhouse gas emissions released would not contribute to climate change. We suggest that more detailed information and quantitative estimates are needed, particularly for construction emissions. For example, the preferred alternative calls for, “constructing approximately 9,300 ft of concrete-lined channels (up to 52 ft wide at the top)” (page 28), along with changes to roadways and other construction projects. Construction activities, such as mixing large quantities of cement, would have impacts that should be fully disclosed in the DEIS to inform decision making and mitigation measures.

In addition, several of the activities proposed under the preferred alternative might enable a larger number of visitors to more conveniently access Lake Mohave, Cottonwood Cove, Katherine Landing, and the surrounding area (project area). For example, among other changes, the preferred alternative allows for: doubling the capacity of the motel at Cottonwood Cove; a new day use area at Ski Cove; expanding the Cottonwood Cove marina from 300 to 484 slips; redevelopment and expansion of campgrounds; and widening existing and adding new roadways. The DEIS does not include estimates of potential increases in vehicles and boats that could result from implementation of this project; nor does the DEIS provide sufficient rationale to demonstrate that such increases would not occur. The degree to which increased usage could impact air quality is, therefore, unclear.

In addition, the Clean Air Act General Conformity Rule is not discussed. Since emission estimates are not provided, it is unclear whether Conformity would apply. A brief summary of Conformity and its applicability to this project would strengthen the Final Environmental Impact Statement (FEIS).

Recommendations for the FEIS:

- Estimate emissions from all construction activities. Based on emission estimates, qualitatively assess local and regional impacts on air quality from construction of the proposed project.
- Estimate the number of new visitors, including increases in vehicles and boats, that could result from implementation of the proposed project, and fully assess associated air quality impacts.
- Clearly indicate the project area’s attainment status for all criteria pollutants under the National Ambient Air Quality Standards.
- Discuss Clean Air Act Conformity Regulations and their applicability to this project.
- Commit to minimize construction air emissions through cleaner diesel technologies, anti-idling policies, and other best practices. See EPA’s cleaner diesel website for information on specific best practices (<http://www.epa.gov/diesel/>), and specify, in the FEIS, which strategies will be implemented.

Water Quality

Water quality is not fully assessed in the DEIS, and a brief rationale for its exclusion from full analysis is provided on page 14. In addition to the water quality impacts that could occur if the number of visitors increases, construction activities and use of the proposed flood mitigation system could potentially impact water quality. More information is needed to document whether impacts would be significant and to inform decision making and mitigation measures.

Recommendations for the FEIS:

- Provide more details on specific mitigation measures that would be implemented to prevent water quality impacts from construction.
- Describe any potential water quality impacts from the proposed flood mitigation system, which would carry some flood water through concrete-lined channels and use dikes to divert other waters over washes.
- Assess potential impacts to water quality from increases in boating, roadway runoff, body contact with water, among other impacts that correspond to potential increases in visitor use.
- Discuss whether moving and/or expanding parking and roadways would increase runoff pollution.
- Commit to implementing low impact development strategies for stormwater control.

Waters of the U.S.

It is unclear whether a Clean Water Act Section 404 permit would be needed prior to construction of the proposed floodplain mitigation system. Mitigation under the action alternatives calls for, “constructing a diversion dike and channel system in Ranger Wash upstream of the developed area to intercept and redirect a majority of flood flows into a parallel wash north of the developed area” (page 27). The DEIS does not indicate whether the specific washes that would be impacted fit the classification of Waters of the U.S., and coordination with the U.S. Army Corps of Engineers is not disclosed.

Recommendations for the FEIS:

- Clarify whether any Waters of the U.S. would be filled or disturbed with implementation of the proposed project. If Waters of the U.S. would be impacted, avoid, minimize, and mitigate impacts to the maximum extent practicable.
- Clarify whether a Clean Water Act Section 404 permit would be required for the proposed actions, and document coordination with the U.S. Army Corps of Engineers.

Flood Control

The proposed action alternatives include flash flood mitigation measures that were, “designed to remove all developed areas with overnight occupancy from inundation during the 500-year maximum flood” (page 27). EPA appreciates proactive planning for flood management, especially given the increase in severe storm events predicted under climate change scenarios. While we recognize that the DEIS discusses EO 11988 “Floodplain Management,” we remain concerned with the expansion of a marina and other infrastructure within an area that experiences flash flooding. Additional information on the current flood threats, as well as potential impacts from proposed floodplain mitigation measures, would strengthen the FEIS.

Recommendations for the FEIS:

- Clearly define the term “probable maximum floodplain,” which is used within the DEIS to define the regulatory floodplain, and document coordination with regulatory agencies in defining the floodplain area.
- Clarify whether a hydrologic and hydraulic study has been completed (or updated) to consider impacts from implementation of the proposed flood mitigation system, and ensure that the most recent data are incorporated into the FEIS. If not already completed, we recommend that such a study be conducted and summarized in the FEIS in order to disclose impacts and inform decision making.
- Provide details on impacts that could result from the proposed floodplain mitigation system, such flooding in other locations due to diverted water.
- Provide a more detailed map of the proposed flood mitigation system, including topography, direction that water would be diverted by dikes, locations of washes that would be affected, and a scale to indicate distance.
- Clarify why some facilities (i.e., National Park Service and concessioner housing) are not proposed to be moved out of the floodplain under Alternative 3 (the preferred alternative) although they are proposed to be moved under Alternative 2. The positive and negative tradeoffs of moving these facilities should be clarified.
- Based on maps provided in the DEIS, it appears that engineered flood channels would empty into Lake Mohave near the developed area. Discuss any safety threats, such as contamination or fast increases in water levels, which could impact visitors, property, and fueling stations.

Native American Consultation

The DEIS indicates that there is potential for tribal ethnographic resources to be present in the project area (page 98), and traditional viewsheds, which continue to play important functions among contemporary tribes, could be impacted by the project (page 157). The assessment concludes that overall ethnographic impacts would be avoided through proper siting, site-specific planning, and design. In order for impacts to be avoided, EPA emphasizes the necessity of close coordination with tribes.

Recommendations for the FEIS:

- Ensure that NPS’s tribal consultation process is fully implemented. Augment the documentation of tribal consultation so that it includes: the number of meetings held; dates of meetings; specific tribes met with; concerns raised by tribes; NPS actions to address tribal concerns; and specific plans for ongoing consultation.

Climate Change Impacts on Project Area

Changing climate conditions are predicted to result in more extreme weather patterns, which will likely heighten flood risks. While EPA appreciates that the DEIS sets forth a plan to address 500-year flood events, specific impacts that changing climate conditions are predicted to have on the project area are not discussed in the DEIS.

Recommendation for the FEIS:

- Summarize recent studies, discuss the expected impacts that climate change will have on the project area, and explain how the proposed plan addresses likely impacts.